INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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January 12, 1998

Major Richard Jones
State of Indiana Military Department
Office of the Adjutant General
2002 South Holt Road
Indianapolis, Indiana 46219

Dear Major Jones:

Re: Decision Document for No Further Remedial Action Planned (NFRAP), Atterbury Reserve Forces Training Area, Edinburgh, Indiana

A Site Investigation (SI) was conducted by Montgomery Watson in 1996 at five areas of concern at Camp Atterbury. These Areas were the Battery Disposal Areas, Impact Area, Wash Rack Area, Wastewater Sludge Lagoon Area, and the Old Landfill Area. Sample concentrations were compared to the IDEM Voluntary Remediation Program (VRP) Tier II Non-Residential Cleanup Goals. A Supplemental Site Investigation (SSI) was conducted by Montgomery Watson in 1996 to further explore additional areas of concern at Camp Atterbury identified by IDEM staff. The SSI included field activities at the Old Landfill Area and the Unit Training Equipment Storage Area (UTES). This Decision Document discusses reasons why a NFRAP for Atterbury Reserves Forces Training Area is appropriate. IDEM Defense Environmental Restoration Program (DERP) staff have reviewed the above named Decision Document for NFRAP and have the following comments:

Impact Area:
No sediment and groundwater sampling exhibited concentrations above IDEM VRP Tier II Non-Residential Cleanup Goals. Therefore, based upon submitted documentation, a No Further Action is appropriate for this area.

Battery Disposal Areas:
Soil and groundwater samples taken at these locations indicated that detected contaminant concentrations were below IDEM VRP Tier II Non-Residential Cleanup Goals. However, there are problems with the placement of the borings and wells. It appears that they are not optimally located to determine the concentration and extent of the contamination. The borings emplaced near Building 123 appear hundreds of feet cross-gradient from the acid discharge area. Also, MW-13 appears down-gradient and cross-gradient from the acid discharge area. The borings and well located near Building 595 are up-gradient and cross-gradient of the source. No borings or wells appear to have been installed at the sources or appropriately down-gradient of the sources.

Wash Rack Area:
No soil samples exhibited contamination in concentrations greater than IDEM VRP Tier II Non-Residential Cleanup Goals. However, results from the samples indicate TPH in excess of 100 ppm in six samples which exceeds IDEM's Leaking Underground Storage Tank (LUST) guidance. Of special concern is 19,000 ppm TPH in sample WR-SS2 which is a potential source area and could migrate to groundwater. DERP staff recommend a resampling at WR-SS2 or a source removal. From a cost and time standpoint, it may be advantageous to excavate the affected area.

Wastewater Sludge Lagoon Area:
No groundwater or soil/sludge sampling results exhibited concentrations above IDEM VRP Tier II Non-Residential Cleanup Goals. Therefore, based upon submitted documentation, a No Further Action is appropriate for this area.

UTES Area:
No soil sampling results exhibited concentrations above IDEM VRP Tier II Non-Residential Cleanup Goals. Therefore, based upon submitted documentation, a No Further Action is appropriate for this area.

Old Landfill Area:
No groundwater sample results from the SI or SSI contained constituents above IDEM VRP Tier II Non-Residential Cleanup Goals. Additionally, biannual sampling results (July 1997) contained no constituents above IDEM VRP Tier II Non-Residential Cleanup Goals. Biannual sampling will continue to be conducted for the next two and a half years. Therefore, based upon submitted documentation, a No Further Action is appropriate for this site.

If you have any questions, please call me at (317) 308-3132.

Sincerely,

John J. Manley Jr., Project Manager
Defense Environmental Restoration Program
Office of Environmental Response

JJM:mg
cc: Rex Osborn, IDEM

DECISION DOCUMENT

FOR NO FURTHER REMEDIAL ACTION PLANNED (NFRAP)

AT CAMP ATTERBURY, EDINBURGH, INDIANA

PURPOSE OF DECISION DOCUMENT

This Decision Document discusses reasons why a No Further Remedial Action Planned (NFRAP) response for Camp Atterbury in Edinburgh, Indiana, is appropriate. This document was developed in accordance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA), and to the extent practicable, the National Contingency Plan. This document was developed by the Installation Restoration Program (IRP), Army National Guard.

SUMMARY OF DECISION TO CONDUCT NO FURTHER ACTION

In 1993, Roy F. Weston, Inc. (Weston) completed a Preliminary Assessment (PA) for Camp Atterbury. The report identified several potential areas of concern at Camp Atterbury. Additionally, due to limited site specific hydrogeological information, the report called for a complete hydrogeological investigation of the facility, including groundwater velocity and flow direction (Weston, 1993). The Indiana Department of Environmental Management (IDEM) concurred with this report and expressed additional concern about private municipal wells located south-southeast of Camp Atterbury, and possible impacts to the aquifer serving these wells. However, impacts to groundwater were not identified in wells existing near the eastern boundaries of Camp Atterbury prior to site investigation activities.

A Site Investigation (SI) was conducted by Montgomery Watson in 1996 at the five areas of concern previously identified in the PA. These areas were the Battery Disposal Areas, Impact Area, Wash Rack Area, Wastewater Sludge Lagoon Area, and the Old Landfill Area. Soil and groundwater samples were collected and analyzed for various constituents, based on the PA and visual inspection of the site. Constituent concentrations were compared to the IDEM Voluntary Remediation Program (VRP) Tier II Non-residential Cleanup Criteria, as specified by the Military Department of Indiana (MDI) and IDEM. No sample taken from any area exhibited concentrations exceeding Tier II Non-residential Cleanup Criteria.

Montgomery Watson completed a Supplemental Site Investigation (SSI) in 1996. Further soil and groundwater sampling was conducted in additional areas of concern as identified

in the SI. All samples taken were below Tier II Non-residential Cleanup Criteria concentrations.

SUMMARY OF SITE RISK

Studies conducted at Camp Atterbury in Edinburgh, Indiana are listed below.

a. A PA to determine the extent of impact on public health and to determine the need for further studies of Camp Atterbury sites was conducted by Weston in 1993.

b. A SI was performed by Montgomery Watson in 1996 to determine impacts to the environment from areas of concern identified in the PA. The SI included soil and groundwater investigations, conducted under an IDEM approved Work Plan.

1. Groundwater - Monitoring wells were installed in the Battery Disposal Areas. Samples were analyzed for metals and pH. The monitoring wells installed in the Wastewater Sludge Lagoon Area, the Old Landfill, and downgradient of the Impact Area were sampled for metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), chlorinated herbicides, organophosphorous (OP) pesticides, pesticides, polychlorinated biphenyls (PCBs), cyanide, and total phosphorous. No analyte was present in concentrations above IDEM VRP Tier II Non-residential Cleanup Criteria in any of the wells sampled.

2. Soil - Samples from the Battery Disposal Areas were analyzed for metals and pH. Soil samples from the Wastewater Sludge Lagoon Area were submitted for laboratory analysis of cyanide, total phosphorous, pesticides, PCBs, and metals. Samples from the Wash Rack Area were analyzed for total petroleum hydrocarbons (TPH), gasoline range organics (GRO), and diesel range organics (DRO). Since a few of the samples contained elevated levels of TPH, a second round of sampling in the Wash Rack Area tested soils for VOCs and SVOCs. Samples were collected and analyzed in accordance with procedures set forth in the Field Sampling Plan, April 1996 (FSP). No soil sample exhibited contaminants in concentrations above IDEM VRP Tier II Non-residential Cleanup Criteria.

3. Sediment - Samples from the five streams leading out of the Impact Area were analyzed for cyanide, total phosphorous, VOCs, pesticides, SVOCs, OP pesticides, chlorinated herbicides, and

metals. No analyte was detected in concentrations exceeding IDEM VRP Tier II Non-residential Cleanup Criteria.

4. Sludge - Samples were obtained from the Wastewater Sludge Lagoon Area via hand auger methods. Samples were analyzed for cyanide, total phosphorous, VOCs, pesticides, PCBs, SVOCs, OP pesticides, chlorinated herbicides, and metals. No sample contained constituents in concentrations above IDEM VRP Tier II Non-residential Cleanup Criteria.

c. A SSI was conducted by Montgomery Watson in 1996 to further explore additional areas of concern at Camp Atterbury identified by the IDEM. Field activities, including monitoring well installation and collection of soil samples, were conducted at the Old Landfill Area and the Unit Training Equipment Storage Area (UTES). These activities were selected on the basis of previous investigations, current and historical records, and available historical information regarding site operations obtained from Camp Atterbury personnel.

1. Groundwater - Wells were installed, developed and sampled by Montgomery Watson downgradient of the Old Landfill Area. Samples were analyzed for VOCs, SVOCs, target analyte list (TAL) metals, cyanide, pesticides, PCBs, OP pesticides, and chlorinated herbicides. No groundwater samples exhibited concentrations exceeding IDEM VRP Tier II Non-residential Cleanup Criteria.

2. Soil - Soil samples were collected at the UTES Area using Geoprobe techniques. Soil borings were advanced to assess environmental impacts due to the historical spraying of waste oils as a method of dust control. The soil samples were analyzed for VOCs, SVOCs, TAL metals, cyanide, pesticides, PCBs, OP pesticides, and chlorinated herbicides. No constituents were present in concentrations above IDEM VRP Tier II Non-residential Cleanup Criteria.

PUBLIC/ COMMUNITY INVOLVEMENT

It is Department of Defense (DoD) and Army Policy to involve the local community as early as possible and throughout the installation and restoration process of an installation. A Community Relations Plan (CRP) is not necessary at this installation, so "community" involvement is limited to interviews of personnel in the immediate area with the intent to use the information to conduct appropriate research.

DECLARATION

The SI determined that no constituents are present in soil, groundwater, or sediments above IDEM VRP Tier II Non-residential Cleanup Criteria at the five areas of concern at Camp Atterbury. The SSI further concurred with the results of the SI and determined that the UTES area contains no constituents above IDEM VRP Tier II Non-residential Cleanup Criteria.

The decision to conduct a NFRAP is based on the analytical data included in the SI and SSI. No further action is required at this time.

CONCURRENCE:

Robert J. Mitchell
The Adjutant General
State of Indiana

Signature

14 Jul 97
Date

Robert A. Clifford
Director
Facilities Engineering and
Environmental

Signature

9 July 97
Date

Richard W. Jones
Federal Environmental Officer

Signature

9 Jul 97
Date

John W. Orr
IRP Project Manager
State Environmental Project Manager

Signature

9 Jul 97
Date